

1SS250

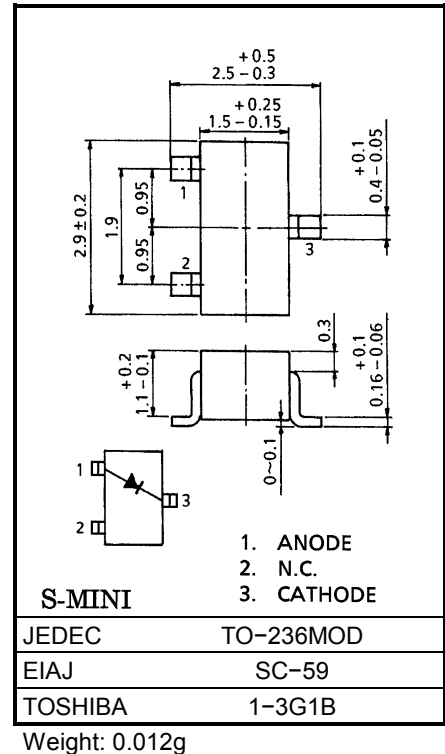
Unit: mm

Ultra High Speed Switching Application

- Low forward voltage : $V_F(2) = 0.90V$ (typ.)
- Fast reverse recovery time: $t_{rr} = 60ns$ (typ.)
- Small total capacitance : $C_T = 1.5pF$ (typ.)
- Small package : SC-59

Maximum Ratings ($T_a = 25^\circ C$)

Characteristic	Symbol	Rating	Unit
Peak reverse voltage	V_{RM}	250	V
Reverse voltage	V_R	200	V
Peak forward current	I_{FM}	300	mA
Average forward current	I_O	100	mA
Surge current (10 ms)	I_{FSM}	2	A
Power dissipation	P	150	mW
Junction temperature	T_j	125	$^\circ C$
Storage temperature range	T_{stg}	-55~125	$^\circ C$



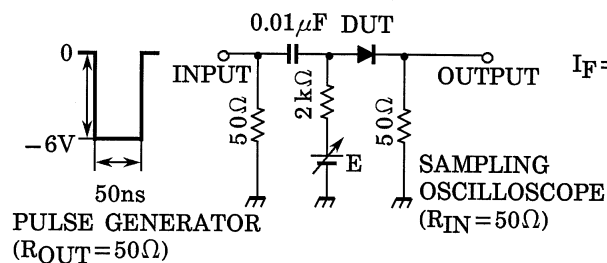
Electrical Characteristics ($T_a = 25^\circ C$)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F(1)$	—	$I_F = 10mA$	—	0.72	1.00	V
	$V_F(2)$	—	$I_F = 100mA$	—	0.90	1.20	
Reverse current	$I_R(1)$	—	$V_R = 50V$	—	—	0.1	μA
	$I_R(2)$	—	$V_R = 200V$	—	—	1.0	
Total capacitance	C_T	—	$V_R = 0, f = 1MHz$	—	1.5	3.0	pF
Reverse recovery time	t_{rr}	—	$I_F = 10mA$ (Fig.1)	—	10	6.0	ns

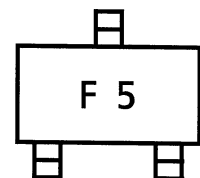
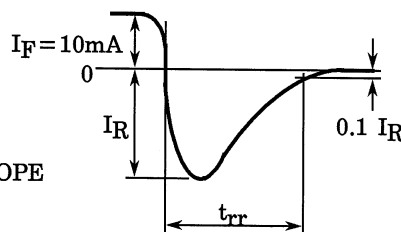
Fig.1 Reverse recovery time (t_{rr}) test circuit

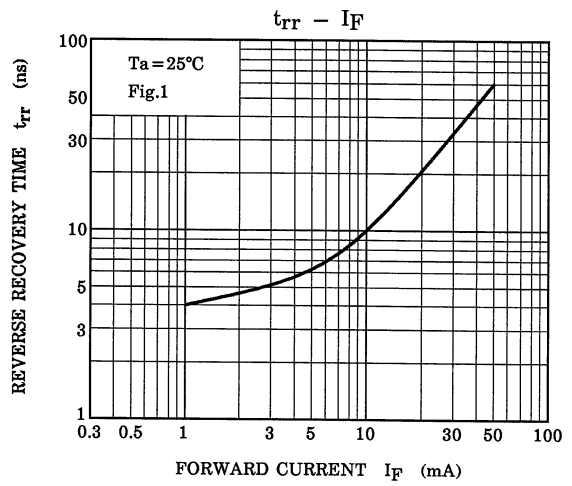
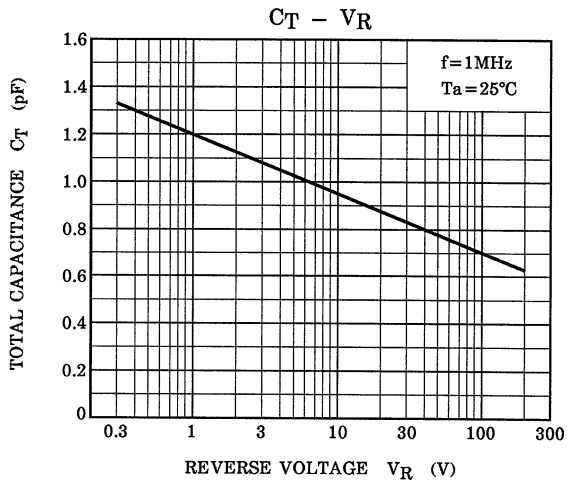
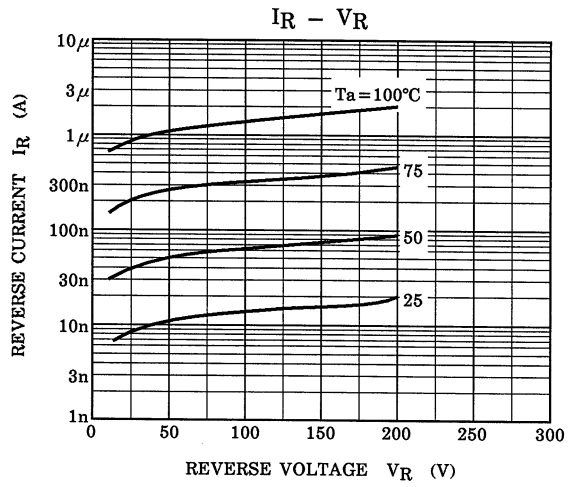
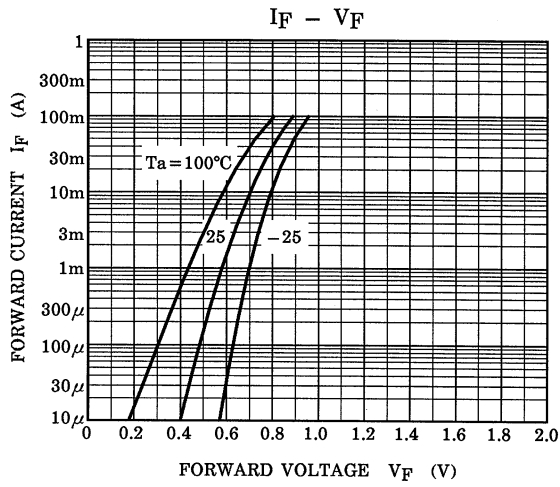
Marking

INPUT WAVEFORM



OUTPUT WAVEFORM





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